DETAILED ACTION

Response to Arguments

Applicant's arguments, see pages 13-14, filed 18 December 2009, with respect to claim 1 have been fully considered and are persuasive. The original final rejection of claim 1 has been withdrawn.

Applicant's arguments with respect to claim 1, although they have been considered, are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 30 recites the limitation "the units of time specified in the time information" in line 3. There is insufficient antecedent basis for this limitation in the claim because the claim upon which it depends (ultimately, claim 1) has been amended so that it no longer recites "units of time" specified in the time information. Rather, the newly amended claim 1 (upon which claim 30 is ultimately dependent) instead refers to "time information which indicates, based on a set of start and end positions specifying a scene in the content data..." Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

> In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.
>
> Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.
>
> ... a signal does not fall within one of the four statutory classes of Sec. 101.
>
> ... signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

Claims 28-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 28-29 are drawn to functional descriptive material recorded on a computer-readable medium. Normally, the claim would be statutory. However, the specification, at pages 76-78 defines the claimed computer readable medium as encompassing statutory media such as a "ROM", "recording medium...for storing the program,' etc., as well as ***non-statutory*** subject mater such as a "the program code may be supplied to the AV data reproducing apparatus (10) via a communication network" and "the present invention can be realized by either a carrier wave or a data signal row, each of which represents the aforesaid program code and each of which is electrically transmitted."

As the specification explicitly states that the control program may be embodied as a signal, and a signal is an example of a "computer-readable medium," the examiner maintains that the claim is drawn toward non-statutory subject matter. Because the specification (see e.g., page 77, lines 2-31) defines numerous examples of statutory subject matter, the examiner recommends inserting the phrase "non-transitory" before "computer-readable medium" in claims 28-29 in order to exclude the non-statutory embodiments of the control program (i.e., the embodiments drawn towards signals, carrier waves, and other transitory computer readable media) from the scope of the claim.

> A "signal" embodying functional descriptive material is neither a process nor a product (i.e., a tangible "thing") and therefore does not fall within one of the four statutory classes of § 101. Rather, "signal" is a form of energy, in the absence of any physical structure or tangible material.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-11, 13, 19, 22, and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsumagari et al (US PgPub 2003/0161615), hereinafter referred to as Tsumagari, further in view of Miwa et al (US Patent 6,553,179), hereinafter referred to as Miwa.

Regarding **claim 1**, Tsumagari discloses an enhanced navigation system using digital information medium. Further, Tsumagari discloses a DVD-Video player incorporating an enhanced navigation system (ENAV system), which reads on the claimed, "an information reproducing apparatus for controlling, in accordance with a manipulation input, reproduction of content data read out from a content recording medium," as disclosed at paragraph [0022] and exhibited in figure 1; the apparatus comprising:

DVD-Video player (100) comprising ENAV engine (300) for playing back and processing ENAV contents (30) which include video information (text, still image, moving image, or animation), storyboard (still image), scenario (text), and other data (audio data and the like), the contents being controlled by event controller (310) which receives user events corresponding to user operations (menu call, title jump, playback start/stop/pause and so forth) and generates the events corresponding to the user event control signal, which reads on the claimed, "additional function information reading means for reading out, from the content recording medium, additional function information indicating an additional function correlated with the manipulation input; and additional function executing means for executing the additional function in response to the manipulation input," as disclosed at paragraphs [0058], [0072], [0088], [0176], and [0093].

However, Tsumagari fails to disclose the remaining limitations of the claim. The examiner maintains it was well known to include the missing limitations, as taught by Miwa.

In a similar field of endeavor, Miwa discloses an optical disc for coordinating the use of special reproduction functions and a reproduction device for the optical disc. Further, Miwa discloses a "mask flag" included in the PCI and PGC information which is used to indicate whether or not certain functions are allowed or not during reproduction of certain VOB's, including the invalidation of activation of functions which use fast-forward, which reads on the claimed, "wherein the content recording medium stores data having a data structure in which the additional function information corresponds with time information which indicates, based on a set of start and end positions specifying a scene in the content data, the manipulation input is allowed or prohibited," as exhibited in figures 9A, 10A, 12-13, and 35 as well as their corresponding texts (with particular emphasis on, e.g., column 23, lines 6-11 and column 18, lines 42-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Tsumagari to include a "mask flag" included in the PCI and PGC information which is used to indicate whether or not certain functions are allowed or not during reproduction of certain VOB's, including the invalidation of activation of functions which use fast-forward, as taught by Miwa, for the purpose of ensuring that information regarded as important by the title developer, such as commercials, definitely be displayed to the user (see e.g., column 4, lines 33-38).

Regarding **claim 2**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see claim 1). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 1 above.

Regarding **claim 3**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see claim 1). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 1 above.

Regarding **claim 4**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see claim 1). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 1 above.

Regarding **claim 5**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see claim 1). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 1 above.

Regarding **claim 6**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see claim 5). Further, Tsumagari discloses ENAV playback information comprising commands variables, including a command and variable which are used to change an audio level (a command that instructs to change an audio level and a variable that designates an audio level after change), as well as audio output controller (354) which has a function of selecting audio output of ENAV engine when audio data is out from only ENAV engine but not DVD-Video playback engine as well as switching and selecting audio output of the ENAV engine and the DVD-Video playback engine in accordance with an output method of user's choice from the user operation unit, which reads on the claimed, "the additional function information includes a flag indicating whether or not sound of the content data is muted while the audio information is reproduced," as disclosed at paragraphs [0115] and [0125]-[0126].

Regarding **claim 7**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see any one of claims 1-6). Further, Tsumagari discloses the ENAV contents are displayed in synchronism (or connection or combination) with a change in contents (change in scene) of DVD-Video contents (10) while playing back a scene of a movie or drama as DVD-Video contents, which reads on the claimed, "the additional function information is so set as to correspond to each scene of the content data," as disclosed at [0181].

Regarding **claim 8**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see any one of claims 1-6). Further, Tsumagari discloses DVD-Video playback engine (200) and ENAV playback engine (300) displaying a menu upon a user's request of pressing a menu button on a remote controller, which reads on the claimed, "main function control information reading means for reading out, from the content recording medium, main function control information indicating whether or not execution of a main function is approved, which main function is a function intrinsically corresponding to the manipulation input; and main function control means for controlling, in accordance with the main function control information, the execution of the main function, which execution is carried out in response to the manipulation input," as disclosed at paragraphs [0186]-[0190].

Regarding **claim 9**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see claim 8). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 7 above.

Regarding **claim 10**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see claim 8). Further, Tsumagari discloses when a user presses a menu button on the remote controller, a user event controller (310) in ENAV engine (300) receives this signal, and when the operation which is not expected as any user even is executed at the user operation unit, even generation-command-property processor (320) outputs an event control signal that "blocks a user event corresponding to user's operation at that time" so that controller (310) can inhibit "a specific event from being transmitted according to a script described in the ENAV contents," which reads on the claimed, "a function for notifying information concerning disapproval of execution of the main function is assigned, as an additional function, to the manipulation input corresponding to the main function whose execution is disapproved by the main function control information," as disclosed at paragraph [0218].

Regarding **claim 11**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see claim 8). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 10 above.

Regarding **claim 13**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see any one of claims 1-5). Further, Tsumagari discloses a menu call operation that produces a DVD-Video menu or displays a still image at the moment of pausing playback which continues until the user makes the next operation (menu button operation, pause button operation, or the like), which reads on the claimed, "the manipulation input corresponds to either (i) manipulation of suspending the reproduction of the content data or (ii) manipulation of halting the

reproduction of the content data, and a function for notifying information different from the content data that is being reproduced is assigned, as an additional function, to the manipulation input," as disclosed at paragraph [0207].

Regarding **claim 19**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see claim 10). Further, Tsumagari discloses an interactive mode using the ENAV contents, the interactive mode including a mixed frame mode that displays DVD-Video playback images and ENAV contents placback image together, which reads on the claimed, "the additional function is a function for notifying the information such that the information is overlaid with the content data that is being reproduced," as disclosed at paragraphs [0165]-[0167].

Regarding **claim 22**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see claim 13). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 19 above.

Regarding **claim 26**, the examiner maintains that the claim is merely the corresponding method to the apparatus of claim 1, and therefore the limitations of the claim are rejected in view of the explanation set forth in claim 1 above.

Regarding **claim 27**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see claim 1). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 25 above.

Regarding **claim 28**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see any one of claims 1-6). Further, the examiner maintains that the claim is merely the corresponding program controlling the apparatus

of any one of claims 1-6, and therefore the limitations of the claim are rejected in view of the explanation set forth any one of claims 1-6 above.

Regarding **claim 29**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see any one of claims 1-6). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 28 above.

Regarding **claim 30**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see claim 8). Further, the limitations of the claim are rejected in view of the explanation set forth in claims 1 and 8 above.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsumagari et al (US PgPub 2003/0161615), hereinafter referred to as Tsumagari, in view of Miwa et al (US Patent 6,553,179), hereinafter referred to as Miwa, further in view of Evans et al (US Patent 7,469,410), hereinafter referred to as Evans.

Regarding **claim 12**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see claim 8). However, the combination fails to disclose the remaining limitations of the claim. The examiner maintains that it was well known in the art to include the missing limitations, as taught by Evans.

In a similar field of endeavor, Evans discloses playback control methods and arrangements for a DVD player. Further, Evans discloses a "controlled unlocking" or restricted access feature to all or portions of DVD content (110) controlled by player application (102), in which the application can notify the user of the required parental level that is required to continue playing DVD content (110), which reads on the

claimed, "wherein a function for notifying information representing an approved manipulation input is assigned, as an additional function, to the manipulation input corresponding to the main function whose execution is disapproved by the main function control information," as disclosed at column 5, lines 61-65 and column 6, lines 45-51.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Tsumagari and Miwa to include discloses a "controlled unlocking" or restricted access feature to all or portions of DVD content (110) controlled by player application (102), in which the application can notify the user of the required parental level that is required to continue playing DVD content (110), as taught by Evans, for the purpose of negating a user having to guess a required level through trial and error.

Claims 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsumagari et al (US PgPub 2003/0161615), hereinafter referred to as Tsumagari, in view of Miwa et al (US Patent 6,553,179), hereinafter referred to as Miwa, further in view of Proehl (US Patent 6,614,844), hereinafter referred to as Proehl.

Regarding **claim 14**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see any one of claim 1-5). However, the combination fails to disclose the remaining limitations of the claim. The examiner maintains it was well known in the art to include the missing limitations, as taught by Proehl.

In a similar field of endeavor, Proehl discloses a method for watermarking a video display based on viewing mode. Further, Proehl discloses displaying different types of data during a fast-forward operation, which reads on the claimed, "wherein the manipulation input corresponds to manipulation of changing either (i) a reproduction direction of the content data or (ii) reproduction speed of the content data, and a function for notifying information different from the content data that is being reproduced is assigned, as an additional function, to the manipulation input," as disclosed at column 2, line 58 through column 3, line 15, and exhibited in figures 3A-3F.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Tsumagari and Miwa to include displaying different types of data during a fast-forward operation, as taught by Proehl, for the purpose of providing a usable viewer content even during a fast playback mode during which the regular video content may progress too quickly to provide any meaningful information.

Regarding **claim 15**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see any one of claims 1-5). Further the limitations of the claim are rejected in view of the explanation set forth in claim 14 above.

Regarding **claim 16**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see any one of claims 1-5). However, Tsumagari fails to disclose the remaining limitations of the claim. The examiner maintains that it was well known in the art to include the missing limitations, as taught by Proehl.

In a similar field of endeavor, Proehl discloses a method for watermarking a video display based on viewing mode. Further, Proehl discloses watermark data can be added to selected key frames in the video stream to act as bookmarks for those selected frames so they can be easily located during fast playback, which reads on the claimed, "the manipulation input corresponds to manipulation of carrying out fast-forwarding of the content data, and a function for (i) carrying out the fast-forwarding of the content data until a predetermined position and (ii) reproducing the content data at normal speed from the predetermined position is assigned, as an additional function, to the manipulation input," as disclosed at column 2, line 65 through column 3, line 1 and exhibited in figure 3A.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Tsumagari and Miwa to include watermark data can be added to selected key frames in the video stream to act as bookmarks for those selected frames so they can be easily located during fast playback, as taught by Proehl, for the purpose of providing a usable viewer content even during a fast playback mode during which the regular video content may progress too quickly to provide any meaningful information.

Regarding **claim 17**, the combination of Tsumagari and Miwa discloses everything claimed as applied above (see any one of claims 1-5). Further the limitations of the claim are rejected in view of the explanation set forth in claim 14 above.

Regarding **claim 18**, the combination of Tsumagari, Miwa, and Proehl discloses everything claimed as applied above (see claim 17). Further the limitations of the claim are rejected in view of the explanation set forth in claim 17 above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Thomas et al (US PgPub 2008/0282285) discloses an interactive media system and method for presenting pause-time content. Further, Thomas discloses prohibiting a user from skipping over, for example, commercial messages in a recorded program (see [0044] – [0045] as well as figures 7-8 and their corresponding text).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARC DAZENSKI whose telephone number is (571)270-5577. The examiner can normally be reached on M-F, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571)272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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